CHAPTER II

COMMUNITY HEALTH ASSESSMENT: IDENTIFYING MATERNAL, CHILD HEALTH NEEDS AND SETTING PRIORITIES

Following the adoption of a mission statement and a set of goals, the next stage in the planning process is the community health assessment.

A community health assessment, often referred to as a community health needs assessment, is a core public health function required of each local Title V funded MCH agency. It is required as part of the application process for Title V MCH federal Block Grant funds. Every five years a local health jurisdiction must do a community assessment and a five-year plan for allocating the block grant resources to address the identified needs of its MCH population.

In this guide, we define community health assessment as:

- The collection, analysis, interpretation and presentation of information about health conditions, risks and assets in a community related to the health of the population of interest, and
- The identification and prioritization of problems to be considered for action by the planning group.

This chapter provides a detailed description of a community health assessment. The chapter describes:

- The scope of a community health assessment, and
- The five components of the community health assessment applied to identifying the needs of the maternal and child health population, which are to:

    1. Develop a community health profile;
    2. Assess capacity to address health issues;
    3. Select MCH indicators;
    4. Collect, analyze, and present the data; and
    5. Identify problems and set priorities

A COMMUNITY HEALTH ASSESSMENT

Your community health assessment should answer or at least address the following questions:

- What is the overall health status of the population?
- What are the population's health problems/needs?
- Which population subgroups (gender, age, ethnicity, insurance/payor) are at highest risk for health problems?
- Where (geographically) are high-risk groups located?
- Are there trends in the data that show that the problem is increasing or diminishing?
- How does your community compare to others (federal, state, similar community) over time?
- What resources are available in the community and are there gaps in resources?
- Is the capacity of the local health department adequate to meet identified needs?

- What are the community's strengths or assets?
- What are the priorities among identified problems/needs?

Data should be collected on population demographics and socioeconomic indicators, including health status, health risks, health related behaviors, environmental hazards, health care access, the health services utilization of an entire population and the assets or protective factors within a community that promote health. The assessment will provide a picture of the community's overall health. It should, further, focus on the specific population of interest, such as the maternal child health population, and present indicator data to identify their specific health problems, risk factors, service deficiencies, and groups within the population at high risk for health problems.

Analysis of this data will inform the selection of priority health problems, the problem analysis and the development of interventions. Frequently, assessment data and data from ongoing quality assurance activities are used in tandem to generate a global understanding of the causes underlying the identified problems. The assessment also establishes a baseline that will be used for longitudinal comparisons with data collected in the future as part of the ongoing monitoring and assurance functions.

FIVE COMPONENTS OF A COMMUNITY HEALTH ASSESSMENT TO IDENTIFY MATERNAL CHILD HEALTH NEEDS

Component 1. Compile the Community Health Profile

The community health assessment process should begin with the development of a community health profile. The community health profile is a description of the overall community. The profile should give the reader a picture of the quality of life in the community, the overall health and well being of the residents and a summary of the benefits and risks related to living in the community.

In order to describe the health of a given community, *public health indicators* must be used. Public health indicators are also referred to as *community health indicators* or *population health indicators*. Public health indicators are precisely defined, standardized, quantifiable measures of a population's health risks, health status, or health service utilization. (For a more complete description of indicators, see Appendix II-A.)

The profile should include indicators of the population's socio-demographic status, health status, health risk factors, and access to health and social services. It presents a description of any environmental or geographic characteristics that affect individual or community health as well as a summary of all the current changes in the community that could impact the health and well being of residents. These changes could include: political issues, new policies or changes in funding or in the health and social service delivery systems. The profile provides the context in which MCH population health needs will be identified and will highlight factors (e.g., geographic, political or social) that need to be considered when responding to health problems.

Much of the indicator data for a community profile are available in regularly produced government reports. For example, the U.S. Department of the Census produces reports on both the decennial census and annual Census Population Surveys. Summaries of these data and reports are readily accessible on the World Wide Web and can provide much of this data. The California Department of Finance updates census estimates annually. County and city health departments as well as individual programs at the California Department of Health and Human Services, the city/county planning office, and local and state social service offices all produce some type of annual reports containing data on indicators related to their areas of interest. Most of these reports are now available on the web. Appendix II-B provides a list of data available on the web that can be included in a community profile.

A community profile should contain the following types of information:

- A description of the geographic features of the health jurisdiction that may affect health status or quality of life
- A summary of relevant data from the U.S. Census including: current population by age, gender and race/ethnicity; language proficiency; percent foreign-born; family structures, educational status; median income and percent living in poverty; and employment status
- Highlights from vital records including: fertility and birth rates, death rates, and causes of death
- Communicable disease rates
- Availability of affordable housing and jobs
- Trends in school enrollment, including socioeconomic and demographic characteristics and high school completion rates
- A description of economic factors that are impacting a community such as industries or military bases opening or closing
- Major health issues facing the total community (not specific to the MCH population) such as food safety, bioterrorism, or environmental health issues
- Political issues that may result in policy or funding changes affecting health
- A summary of immigration trends when relevant

The following table provides an example of the contents of an adequate community profile.

Example of Contents of a Community Profile

Demographic Indicators
Description of trends in the population by age, gender, race and ethnicity
Percent of residents with limited English proficiency
Percent of residents who are foreign-born

Economic Indicators
Percent of residents with incomes below poverty
Percent of residents who are unemployed
Percent of housing that is affordable

Educational Indicators
Percent of residents with HS diploma
HS completion rate

Health System Indicators
Percent of population without health insurance

Percent of communities with physicians/clinics taking MediCal
Percent of communities with neighborhood clinics

Health Status Indicators

Birth and fertility rates by age of mother, race/ethnicity and residence
Infant mortality rates
Mortality rates overall and top ten causes by age and race/ethnicity
Communicable disease rates
Percent of 2 year olds who are adequately immunized
Percent of residents who smoke
Percent of residents who are overweight

Wherever possible data should be disaggregated by age, gender and geographic area and at least five years trend data should be provided.

The community profile can also include a community assets assessment, which is, in some profiles, included in the community resources assessment.

Community Assets Assessment

There is increasing evidence that certain community characteristics and resources are associated with greater well being of residents and fewer negative health outcomes. Assessing these assets involves quantifying those characteristics. There are a number of approaches to doing this.

Some communities map those resources shown to be effective (Kretzman and Mc Knight[i]). Examples of such resources could include: the distribution of libraries, playgrounds or other recreational facilities, health care facilities serving poor mothers and children, or schools with after school programs for parents that work. A number of California counties have been implementing the Centers for Disease Control and Prevention (CDC) Mobilization for Action through Planning and Partnerships (MAPP) model that includes a community themes and strengths assessment. These types of asset assessments are relatively inexpensive to conduct and within the level of expertise of most public health department staff.[ii]

An approach that is being used in a number of states, primarily in the area of adolescent health, is that of assessing both individual and community assets through the use of survey instruments. The two most widely used instruments are the "Search Institute Developmental Assets Survey[iii]" and the "National Longitudinal Study of Adolescent Health."[iv] This approach requires trained interviewers, careful data collection and analysis and is best accomplished by professional survey research organizations. Thus, this approach demands greater financial resources.

Component 2. Assess Capacity to Address Health Issues

Community Resources Assessment

Every community health profile should contain information on the capacity of its healthcare and social services systems to meet the health needs of its population. The purpose is to assess the scope and adequacy of the health and social services systems

within the community to meet the needs of the MCH population. This section should identify and describe both strengths and gaps in services and concerns regarding access to healthcare and health-related services from the perspectives of financial access, cultural acceptability, availability of prevention and primary care services and availability of specialty care services. The material should be organized systematically. It could be organized by population group (e.g., pregnant women, mothers, and infants; children and adolescents), type of service (e.g., prenatal), or geographic areas (neighborhood or zip code). Organize the information in the manner that is useful to your planning group. When writing the assessment report, tables, charts, or maps of the resources can be included as an appendix to the community resources assessment section to support the conclusions drawn and gaps and opportunities identified.

Include an assessment of how groups (coalitions, collaboratives and networks) are addressing the needs of the MCH population. The description of each group may include its goals, objectives and key activities as well as its membership (agencies and groups represented).

Local Agency Program Capacity Assessment

It is also important to assess the capacity of the local MCH program for carrying out its public health functions and to identify issues and opportunities. Assess MCH program capacity to perform each of these functions: 1) monitor local MCH population health status; 2) diagnose and investigate MCH problems in the community; 3) inform, educate and empower people about MCH issues; 4) mobilize community partnerships to identify and solve MCH-related problems; 5) develop policies and plans that support MCH related health efforts; 6) link women and children to needed health and social services; and 7) evaluate the effectiveness, accessibility, and quality of MCH population-based health services. Assess how your program is performing in each of these areas and identify the program's strengths, inadequacies, challenges, and opportunities. This is usually an internal process. When working with your group, a table or matrix can be developed and used effectively in this assessment process. It can then be shared with the planning group and included in the assessment report.

Some local MCH programs have participated in the implementation of the CDC MAPP model[ii] in their jurisdictions and can use or adapt the assessment as it specifically applies to their MCH program capacities. In the assessment report, summarize the process used to assess your program's capacity to perform these core functions. If your program is conducting or has conducted any MCH population research, you will also want to highlight the research activities and how the findings have been used to increase MCH capacity.

In addition, assess the cultural competency of the MCH program, the organizational relationship of the MCH program within the public health department and consider how current issues in the public and/or private healthcare sector are having an impact or an anticipated impact on the MCH program, its role in the community, its functions and its capacity to perform its functions. For the reader of the assessment report, it will be helpful to provide an organizational chart of the health department, as well as that of the MCH program in an appendix to this section of the report.

Component 3. Select Maternal Child Health Indicators

Within the context of the overall community assessment, the specific status and conditions of women, children and families is assessed using selected Maternal Child Health (MCH) Indicators.

The selection of MCH indicators that are pertinent to the mission and goals of the MCH planning group is a very important step in the assessment process. While staff may have identified the overall community health indicators, it will be essential that your planning group be involved in the selection of the MCH indicators that will be used in the needs assessment and monitored over time. There are hundreds of potential indicators. Attempting to collect data for all of these would be unrealistic, confusing and expend unnecessary staff resources. We suggest an approach that limits and focuses this effort.

Using a Facilitated Group Process to Select MCH Indicators

MCH programs are encouraged to develop a representative community planning group, as discussed in Chapter I. Group members come with a range of perspectives, individual biases and personal agendas. Without a structured and fair process, groups frequently make decisions about what issues are important and what indicators they will use to assess MCH health status based on some of the following: anecdotal evidence (e.g., "The Mayor's niece wasn't in an infant car seat when she was injured in a car accident, therefore, public education about infant safety seats is needed"); pressure by coalition members with a specific agenda (e.g., the breastfeeding coalition wants to do a media campaign); or the availability of categorical funding (e.g. tobacco tax money is available for smoking cessation).

Apart from the issues outlined above, interpersonal conflicts and personality styles can also impact the decision-making process. Or, there may be personal or agency rivalries that have existed for many years. Individuals with persuasive and/or aggressive verbal styles may dominate discussions and decisions. Some participants are simply shy and reluctant to express opinions in a group setting. Those with more extroverted personalities may monopolize the meeting. This often happens when community representatives or consumers with limited or no community health background or previous group planning experience are brought together with health care professionals or professional advocates. For these reasons a structured approach is necessary to guarantee a systematic, fair and inclusive process. All perspectives need to be heard and considered at each step of the process. If members feel they are heard and they understand and accept the process, they are much more likely to "buy-in" to the results than if they feel the process was arbitrary or biased.

Various methods can be used to facilitate the planning group's selection of a feasible number of indicators. They range from simple to highly structured processes. The process chosen should be determined after assessing the group dynamic and the unique needs of the local group (e.g., a group may be using this process for community organizing). This assessment determines the type and structure of the process. For example, in training workshops for members of California's Proposition 10, "Children 0-5," local assessment and planning commissions, a relatively simple process has been used. In this process, three selection criteria are applied to a list of potential indicators

to identify "headline" indicators. (In-Depth Results Accountability Workshops with Mark Friedman[v]). We have found the process described below to work well where there are diverse groups with many perspectives. In this process, the group develops or identifies its selection criteria, which it then applies to its list of potential indicators using a rating tool to prioritize among them.

Developing Indicator Selection Criteria

A facilitator should lead the group through the process of identifying a set of agreed upon indicator selection criteria. Selection criteria will enable the group to rank the proposed indicators in an inclusive, systematic and objective way, enabling it to establish a prioritized list of indicators. The process promotes buy-in to the resulting outcome by helping to identify shared values and building consensus, or, at a minimum, compromise among members. It helps group members to accept the decision to include one indicator and not another when opinions differ.

The facilitator can use the same group process techniques in the criteria selection process as he/she did in the development of the mission and goals. Participants can be given time to individually write down criteria he or she would want to include. Then the group members take turns sharing their ideas. The ideas are written on a board visible to the group, so that all suggestions can be given equal consideration. In order to expedite this process where time constraints exist, the facilitator can start with an existing list of criteria, such as the one below, providing adequate time for discussion and amendment of the list. Generally, it is best to limit the number of criteria finally selected by the group to no more than eight.

The following are examples of frequently used criteria:

- The indicator must be a valid measure of a health outcome, a health condition, health access, health care or a health related asset
- The indicator reflects a condition or outcome that is severe or affects large numbers of people
- The condition or outcome could be impacted by either public health or clinical interventions
- The indicator definition must be consistent with widely acceptable national standards
- There is a broad consensus on indicator utility
- The indicator must be applicable across populations or programs
- The indicator must be quantifiable
- Data must be available for both the numerator and denominator
- Population-wide data or a representative population sample must be available for measurement

Applying Indicator Selection Criteria

After agreeing on a set of criteria, the group should generate a list of possible indicators that they will use to assess the needs and assets related to each of the goals they established (See Chapter I, Developing a Vision/Mission Statement and a Set of Goals for the Plan).

The group should be given data to review prior to identifying the potential indicators. There should be a discussion of the major findings and the implications for indicator selection (e.g., the data shows that infant death rates are so low in your county that choosing this indicator would not be useful). Then, for each goal, the group should identify and discuss potential indicators and develop an indicator list. A normative group process can be used to develop the list of potential indicators, with the facilitator asking each member to suggest an indicator. All suggestions should be recorded and visible to the group members. The group can then decide whether they want to rate all of the suggested indicators or eliminate some before rating. There needs to be a brief discussion on each of these indicators, making sure that all members understand the indicator definition and what it is in intended to measure.

Following the discussion, the facilitator uses the "Tool for Prioritizing Health Indicators" (Appendix II-C) with the group to assist it to prioritize among the suggested indicators. The indicators are listed in the left-hand column and the criteria in the numbered spaces at the top of the page. Members of the group individually rate each indicator according to the agreed-upon criteria using the prioritization grid. Each participant calculates his/her score for each indicator. Each individual's indicator selection grid is then collected or there is a group process of reporting scores. A staff member sums the individual scores to provide the composite score for each indicator and lists the indicators in their resulting rank order. At a subsequent meeting the group reviews the results and makes a final decision on which indicators to include in their needs assessment. Before making this final decision, staff and group members will want to assess the availability of the indicator data.

See Appendix II-D for an example of the results of an indicator selection process in one California County.

Evaluating Data Sources

Once the group has generated and prioritized a list of indicators, it is critical to evaluate each data source for each indicator. This data needs to be available and useable in the task of monitoring changes in health systems. Only after looking at a data source critically can it be determined if its respective indicator can be used. Note that at this phase, you are not collecting specific data on specific indicators. Rather, you are assessing the adequacy of the sources of data for your indicators. Although each data source has very distinct characteristics, there are some criteria that apply to evaluating any data set. The following factors should be considered when assessing the feasibility of utilizing a particular data set:

1. **Accuracy –** Is there agreement that the data are accurate and complete?
2. **Timeliness** – are the data recent enough to be useful for assessing and monitoring the status of the indicator?
3. **Geographic Specificity –** is there a geographic identifier such as address, census tract, or ZIP code that can allow you to identify the population that resides in the area you have chosen to target your community activities?
4. **Specificity of Demographic Data –** Is there enough detail on the race/ethnicity, place of birth to allow you to identify indicator data for those populations in your targeted area?

5. **Data Consistency and Standardization –** Are the definitions of data items such as race/ethnic categories consistent with those in other data sets? Does the data set use nationally accepted standards for coding?
6. **Data Availability over Time –** Will the data be available over time in a consistent way so that you can use this source for trend analysis?
7. **Ability to Identify Individuals or Events** - Can you distinguish between the number of individuals vs. the number of events so that you can generate a population based rate for individuals with a particular health problem or who use a particular health service?

Criteria applicable to data collected through surveys on a sample of the population:

1. **Adequate Sample Size –** Does a survey contain a large enough sample to be able to look at the population subgroups and geographic area of interest?
2. **Sample Validity** -- Was the survey data collected from a scientifically random sample or could the sample give biased results?
3. **Potential for Use of Instrument for Primary Data Collection –** If the data from a national or state survey are not applicable to your area will the owners of the survey let you use it for an expanded local sample?

A more detailed explanation of these criteria appears in Appendix II-E.

Component 4. Collect, Analyze and Present Data for the Selected Indicators

Once indicators have been selected and the availability and usability of the data sources confirmed, data collection begins. You may wish to develop a team to assist in accessing and interpreting data. Most data collection includes one or more of the following:

- Existing data from Federal, State, Local public health and social services agencies/data bases
- Surveys
- Interviews
- Focus groups

Before conducting the data collection, it is important to understand the types of data collection methodologies available to you and the feasibility of each.

Quantitative Data

Quantitative data sources are those that present information on an indicator in terms of numbers and rates and statistics generated from those numbers. Quantitative data can be primary or secondary. Most public health reports are based on **secondary data**, i.e., data that is collected on a regular basis by someone else (another agency or institution) that is widely accepted for measuring health status, and can be readily used for comparisons with other areas and will be available over time. Generally, groups use state or county data that has been collected on the entire population, such as birth, death or communicable disease data or on particular subpopulations such hospital discharge data or MediCal data. When possible you will want to use secondary data. However, sometimes data is not available for the population in which you are interested at the geographic level that you require. Or, there may be limitations to the available data as

discussed in the data appendix. These are situations where primary data collection is necessary.

Primary data is data collected directly from the target population through the use of surveys, focus groups, interview, or testing. A prerequisite expertise in the development of data collection instruments, computer coding programs and data analysis methods is needed. An important consideration in making the decision to do primary data collection is whether there is a standardized, validated instrument that has been used in a similar population. If so, can it be acquired for a reasonable price and does your agency have the expertise and the resources to collect and analyze the data using this instrument? In some cases, county health departments or coalitions have contracted with the survey developers to do county specific samples using a well tested instrument. An example of this is that a number of county health departments have contracted with the UCLA Health Policy Institute to use the California Health Interview Survey (CHIS) to take larger population samples in their areas.

Where no standard instrument exists that can be used to collect data on the indicator under consideration, key questions are "does the agency have the expertise to design one?" or "can the agency afford to hire a consultant to develop one?" If the answer to both of these questions is no, the planning group should not choose the proposed indicator. When the agency makes a decision that it is does want to develop a data collection instrument, the material in Appendix II-F contains a summary of tips on survey development.

Quantitative data has limitations. It is useful data when 1) we know what data we want to collect and 2) we need to generate percents and rates for comparison purposes. However, when we want to break new ground or get a more in-depth understanding of an issue, especially in exploring the attitudes, behaviors, and causes of health problems, it is necessary to collect qualitative data.

Qualitative Data

Qualitative data is information collected using methods that rely on open-ended, in-depth explorations of people's words, thoughts, actions, and intentions. They provide detailed information that can give planning groups an understanding of what a target population may think or feel about a specific issue or a specific project in their community. These data can be collected through case studies, observations of the behavior of individuals or groups, focus groups (structured discussion groups), or open-ended questions used in interviews or incorporated into questionnaires. Questionnaires and interviews can be used to generate both qualitative (narrative) and quantitative data (numerical data; e.g. numbers, ratios and percentages).

Qualitative techniques can be used during the assessment process to gather information from community residents or health care providers to identify health status or health care system issues. Community members or groups within the community can be queried on their health related attitudes and behaviors. Their perceptions can aid in the identification of the most important indicators and in focusing quantitative data collection and analysis efforts.

Qualitative data is often expensive to collect and requires objectivity and expertise in the design of instruments, methods and analysis. Appendix II-G is a more detailed discussion of qualitative data.

A combination of qualitative and quantitative methods is often the best and most efficient approach to collecting in-depth and complete information. The two methods compliment each other and make up for what the other method is lacking.

Organizing and Analyzing Indicator Data

Once the data from a variety of sources is collected, the staff must face the task of organizing and analyzing the data. In order to facilitate these activities the following process is suggested for each indicator / set of related indicators:

- Simple comparisons should be included by age, gender, race/ethnicity, income or insurance coverage/payor source and zip code or census tract of residence. This ensures that where a problem exists in subgroups and neighborhoods, it will not be masked in summary or aggregate data.
- There should be at least 5 years of comparable data. This ensures that trends can be identified.
- Tests of statistical significance should be performed to ensure that observed differences could not be the result of chance. Beware of presenting percentages and drawing conclusions based on small numbers. This is especially true when analyzing zip code or neighborhood level data.
- The data should be compared to pre-selected standards, such as the *Healthy People 2010 Objectives*, state data or another comparison community(s). Comparisons can also be made with data from previous years, especially when either a new intervention has been implemented or a change in health policy or community conditions has occurred.
- A data template can be used to record data on each of the selected indicators. Appendix II-H presents a data template that has been filled in. As you can see, the template allows for the presentation of several years of data, with county-state comparisons and calculation of statistical confidence intervals. The template also contains a graphic representation of the data that can be easily understood by members of the planning groups without statistical expertise. The template is available on the FHOP website http://www.ucsf.edu/fhop.

Case Study: Using Indicators for Prenatal Care Needs Assessment

A rural county MCH Director led a coalition to develop a five-year MCH plan for her county. The coalition identified universal access to prenatal care as a specific goal. They began an assessment process by brainstorming and selecting indicators that will provide data on prenatal care adequacy and access to prenatal care in the county. They selected the following indicators:

For prenatal care adequacy, they chose:

- Adequacy of prenatal care (per the APNCU index) for all pregnancies resulting in a live birth in a calendar year, expressed as the percent of live born infants whose mothers did not receive adequate prenatal care
- First trimester onset of prenatal care, expressed as the percent of live born infants whose mothers received prenatal care in the first trimester

of pregnancy

For prenatal care outcome, they chose:

- Low/very low birth weight, expressed as the percent of live births weighing less than 2,500 grams and less than 1,500 grams at birth

For prenatal care system, they chose:

- Number of OB/GYN physicians per 1,000 population, by payor source and by county region

Using FHOP standardized templates for data analysis (for a template sample refer to Appendix II-H) a review of the county data suggests that compared to the statewide average, significantly fewer women in the county receive adequate prenatal care. In addition, the proportion of women receiving late prenatal care (e.g., entering prenatal care after the first trimester) is also significantly higher than the statewide average. Further analysis of prenatal care measures by mother's age, parity, race and zip code of residence suggests that there are identifiable, high-risk subgroups. For example, the data suggests that residents of rural zip codes, Medi-Cal recipients, younger women and adolescents are at greatest risk for inadequate and/or late prenatal care. For this reason, these groups should represent target populations for intensified intervention in the MCH plan.

Analysis of the low birth weight statistics for the county does not indicate an overall, statistically significant high rate of low birth weight. However, indicator data does suggest several high-risk subgroups, specifically, young women, women with low income (as measured based on average per capita income by zip code), and women with less than a high school education.

The county data also suggests that, compared to rural area physician per capita norms, there does not appear to be an overall shortage of OB/GYN physicians in the county. However, over the past year, enrollment of managed Medi-Cal recipients into the county's local initiative plan has outpaced the plan's ability to recruit and contract local providers. Therefore, while there appears to be an adequate number of OB/GYN providers in the county, the number of providers accepting Medi-Cal recipients was inadequate.

This case study illustrates how indicators can be used in the needs assessment. To summarize, standardized, measurable indicators were selected to enable comparisons and benchmarking and to help pinpoint health outcomes and system barriers that appear to be of particular concern. Results of indicator data analyses are used for MCH health problem identification. The above selected indicators will be measured repeatedly, over time and across populations, and used (at least in part) to monitor the progress and effectiveness of the MCH plan that was subsequently developed.

Presenting the Assessment Results to the Planning Group

When planning groups comprised of the representatives of diverse community agencies and individuals come together to review community health data, volumes of data will be overwhelming and difficult for the participants to absorb. It is important to use these valuable members' time efficiently, minimize frustration and promote engagement in the process. The group members must be able to understand the data, trust the data and agree on what is important to explore further.

It is very important that the data be presented to the planning group in a manner and format that they can understand. If the group has been included in the earlier selection of the indicators and feels confident about the data collection process, then it will be eager to both learn from the data and assess the data for the purpose of setting priorities among identified problems.

Tips for Presentation of the Data

1. Present data in simple tables or graphs that illustrate important comparisons and findings
2. Indicate where there is statistical significance and/or emerging trends
3. If data are left out or not available, be sure it is noted
4. Interpret the data. Provide a brief objective summary of important findings (problems/needs), using bullets or other easy-to-read format
5. Identify likely target groups for interventions

Component 5. Identifying Problems and Setting Priorities

The needs assessment and data analysis should clearly identify those issues that need to be considered in developing an intervention and action plan. The data presentation should discuss the implications of the indicator values and assist the group in the identification of problem areas. It should highlight those indicators that have values that are significantly worse for the particular geographic area (e.g., county, city or neighborhood) or subgroup within the area (e.g., race/ethnic group or age group) when compared to other subgroups, similar counties, the state or the HP2010 objectives. On the other hand, if the values for a particular indicator are the same or better than the state, HP2010 or designated comparison counties, the indicator problem area is probably not one for concern or further analysis. However, there does need to be some mention of all of the selected indicators to assure the coalition that all of their concerns have been investigated. The specific data do not have to be presented but should be available for any member who is interested in reviewing it.

Wherever possible the report or copy of the presentation should be available to group members before the meeting when the findings are presented. One way to encourage participation might be for the group to be given a set of general questions to consider while reviewing the report or listening to the presentation such as: What issues/problems do you think should be considered by the group as priorities? Why? Are there particular groups/ geographic areas that appear to need some special focus?

After the presentation there should be time at the same meeting for the group to discuss the

findings and to develop a preliminary list of those issues that they think should be considered in the subsequent prioritization process.

Because the prioritization process can be controversial, emotional and political, we recommend a formal, facilitated process. A consultant or other neutral person with strong facilitation skills can: 1) lead the group through a structured group process; 2) focus the group; 3) assure all members are heard, and 4) provide accurate documentation of the process. This process minimizes the potential for the individual interests (e.g., an advocacy group or a special population) to override the shared interests of the larger group.

Purposes of a Prioritization Process

- Create a systematic, fair and inclusive process
- Focus decision-making if overwhelmed by many problems
- Challenge partners to critically review data
- Promote rational allocation of resources
- Document a rational decision-making process

Group Process Tools

There is an array of specific tools that can be used to assist groups with setting priorities, ranging from simple ranking methods to multi-stage methods. Smaller, more homogeneous groups may be able to reach consensus using a relatively simple ranking process. However, most planning groups have both a volume of information to wade through and strong group dynamics and, thus, will benefit from a carefully managed process that walks participants through a logical step-by-step decision process. We recommend the following facilitated process for work with a large planning group with a diverse membership**.** It is based on a chapter from the University of North Carolina, Program Planning and Monitoring Self-Instructional Manual, "Assessment of Health Status Problems" that is now out of print. The process is described and discussed below and a detailed facilitator's guide is included as Appendix II-I. An abbreviated version of this process can be used effectively to set priorities in a small or homogeneous group.

Before beginning the process of setting priorities among the problems identified in the community health assessment, it will be important to assess 1) the involvement of the participants in selecting indicators; 2) the involvement of participants in reviewing the needs assessment findings; 3) the time commitment of the participants; 4) the anticipated level of trust and engagement of the group, and 5) historical group dynamics. This will assist in determining how much of the process will be conducted with the full participation of the group, the degree of attention to developing group buy-in and how much can be done by staff or a smaller group of the members prior to meetings. Throughout the process below, note that doing preparation work outside the meeting(s) can save time. How much the group needs to participate in each step to assure buy-in and consensus building is a judgment call.

Steps for Group Prioritization Process

Step 1	Review the overall objectives and process of prioritization
Step 2	Select prioritization criteria for the ranking of problems
Step 3	Develop criteria rating scales
Step 4	Weight the prioritization criteria
Step 5	Review / discuss indicator data
Step 6	Agree on the problem list
Step 7	Use weighted criteria to score problems
Step 8	Sum participant's scores / rank problems
Step 9	Discuss and confirm results

Review the Objectives and Process

Begin with an overview of the priority setting process and an introduction of the objectives of the process. Participants in the process are encouraged to ask questions. A realistic estimate of the time this process will take should be given to the group. There should be an agreed upon commitment of time, e.g., three 1½ hour meetings plus data review time outside the meeting. In our experience, this process ranges from a total of 4 hours to as much as 16 hours. The importance of the member's participation and their willingness to take an objective approach--setting aside their special interests--is emphasized. The objectives and a description of the process can be sent out in advance of the meeting. However, a summary of the process and an opportunity for questions and clarification at the beginning of the meeting is important.

Select Prioritization Criteria

After an overview of the meeting objectives and the problem prioritization process, the group will develop criteria to be used to prioritize health and health care access problems. These criteria will help characterize each health problem further, such that the group can determine if a given problem is more or less important compared to other problems. Criteria should be selected before discussing the specific health problems.

Begin with a group brainstorming session of possible criteria. The group is given time to discuss the proposed criteria and reach consensus on the criteria it will use. A preliminary list can be prepared by staff or a few members of the group and brought to the group meeting for discussion and refinement. Criteria may be added, changed, or removed by the group. There is no perfect set of criteria that apply to every situation.

Examples of criteria are:

- There is a high incidence or prevalence of the health problem
- Problem is amenable to identifiable interventions

Additional examples are included in the facilitator's guide (Appendix II-I). The group should decide on 5 to 8 criteria. More than that will be too complicated and cumbersome with which to work.

Develop Criteria Rating Scales

Once the group agrees on the criteria, it should apply an agreed upon rating scale adapted to each criterion. A predefined rating system is used to capture the degree to which a problem matches a criterion. It can be a 2, 3, 4, or 5-point scale. We usually recommend a 5-point scale. The rating scale for each criterion is developed either with the group or by a subgroup or staff and then discussed and approved by the group. As in previous steps, the discussion and agreement is important.

An example of a scale developed for the criterion, "the problem has severe consequences" is:

1 = The problem is not life threatening or disabling to individuals or society
2 = The problem is rarely life threatening but could be disabling
3 = The problem is moderately life threatening or there is moderate likelihood of disability
4 = The problem is moderately life threatening and there is strong likelihood of disability
5 = The problem has a high likelihood of death and/or serious disability

Note that in the above example, we use a 5-point scale. If the group agrees on this scale, it must use a 5-point scale for all criteria (i.e., one criterion cannot be rated on a 3 point scale while another is rated on a 5 point scale). Failing to use the same scale will result in a skewing of the prioritization process. While the point scale is fixed for *all* criteria, the scale for each of the criterion contains a definition specific to that particular criterion as illustrated in the example. See Appendix II-I for additional example criteria rating scales.

Weight the Prioritization Criteria

Not all of the criteria may be considered by the group members to be of equal importance. For example, a patient advocate might feel that "high incidence of a problem" is more important than "an identified cost-effective intervention is available", while a hospital administrator might feel that cost issues are more important than incidence. There is a method of adjusting for relative importance between criteria.

This method involves the process of weighting each criterion using a points system. For example, using a scale of 1 to 3, a criterion is given a weight of 1 if it is considered important, a 2 if it is very important and a 3 if it is among the most important. The weight score for each criterion must be agreed upon as determined by group consensus. The facilitator guides the necessary discussion among the group's diverse participants. Once agreed upon, the weight for each criterion will be used by every member of the group during his/her individual process of scoring problems.

Review / Discuss the Indicator Data

The facilitator asks the group to now turn its attention to a review of the identified MCH health problems and related indicator data. Group members should have received a copy of and reviewed the problem list and data prior to this process. We recommend

that the staff summarize important information into a framework that facilitates the comparison of the problems. A well-organized written presentation of the data, sent out for participant review before the meeting and followed by questions and discussion during the meeting prepares participants to identify important health problems and to engage in this rational problem prioritization process.

Agree on the Problem List

After review of the data, the group may, by consensus, remove some of the identified problems from the problem list, combine problems, or refine the problem statement (e.g. specify a specific population experiencing the problem). The list of problems to be prioritized is ready to be entered on the problem prioritization tool.

Use Weighted Criteria to Score Problems

Group members will now individually use the weighted prioritization criteria to score each problem. A problem prioritization matrix designed to use the weighted criteria the group has agreed upon is provided in Appendix II-I. The facilitator instructs the participants in the use of this tool and ensures that every participant understands the scoring system. It is wise to lead the group through an example. Each participant then uses the tool to score each of the problems. For specific directions on how to use the tool, see the facilitator's guide, Appendix II-I. This is a thoughtful, analytic process; adequate time should be allocated.

Sum Participants' Scores / Rank Problems

The results of the individual scoring of each problem are entered in a summary table that shows the sum total of the weighted individual scores and the rank order of each problem. The total scores are ranked from the highest, which is priority 1, to the lowest. The summary is presented to the group. An example of an abbreviated summary ranking table is included in the facilitator's guide in Appendix II-I.

Discuss and Confirm Ranked Results

The ranked list of prioritized problems is then discussed among and accepted by the group. If there are questions or disagreement, these are discussed and resolution sought prior to accepting the ranking. Occasionally, a participant will not agree with the majority of the group; however, he/she will have "bought into" the process and, thus, agree to accept the group result.

NEXT STEPS

The group is now ready to either designate an "expert" group or continue as a whole to analyze the priority problems, including identifying their causes and contributors and to proceed to identify effective interventions.

CHAPTER II
SUMMARY

In this chapter we described a community health assessment process as applied to the identification of maternal and child health problems and the subsequent selection of priority problems. We discussed how to collect, analyze and present indicator data. A case example of using indicators within the context of a county prenatal care assessment process is presented. Finally a recommended process of setting priorities among identified health problems is provided.

Key Points to Remember:

- Make sure that indicators are clearly defined, commonly used measures.
- Use criteria to facilitate the selection of a limited number of indicators.
- Base decisions about which indicators to choose on the feasibility of obtaining high quality data over time.
- Present data in a well organized, concise, and easy to understand manner and include objective interpretation.
- Set priorities among the identified problems, using an objective, systematic method such as the suggested prioritization process and tool.

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